

## TWO REMARKABLE SPECIES OF MYCENA FROM CATALONIA (SPAIN)

G. MORENO<sup>1</sup>, R. PÖDER<sup>2</sup> and Giovanni ROBICH<sup>3</sup>

<sup>1</sup>Dpto. Biología Vegetal (Botánica), Universidad de Alcalá de Henares, 28871 Alcalá de Henares, Madrid, España.

<sup>2</sup>Institut für Mikrobiologie, Technikerstraße 25, A-6020 Innsbruck, Österreich.

<sup>3</sup>Museo Civico di Storia Naturale, S. Croce 1730, I-30125 Venezia, Italia.

**ABSTRACT** - *Mycena corynephora* is recorded the first time for Spain. A *neotypus* of *M. font-queri* originally described from Catalonia, is proposed. Microphotographs and drawings of the most important features of the two species are presented.

**Key words** - *Mycena corynephora*, *M. font-queri*, taxonomy, chorology, Agaricales.

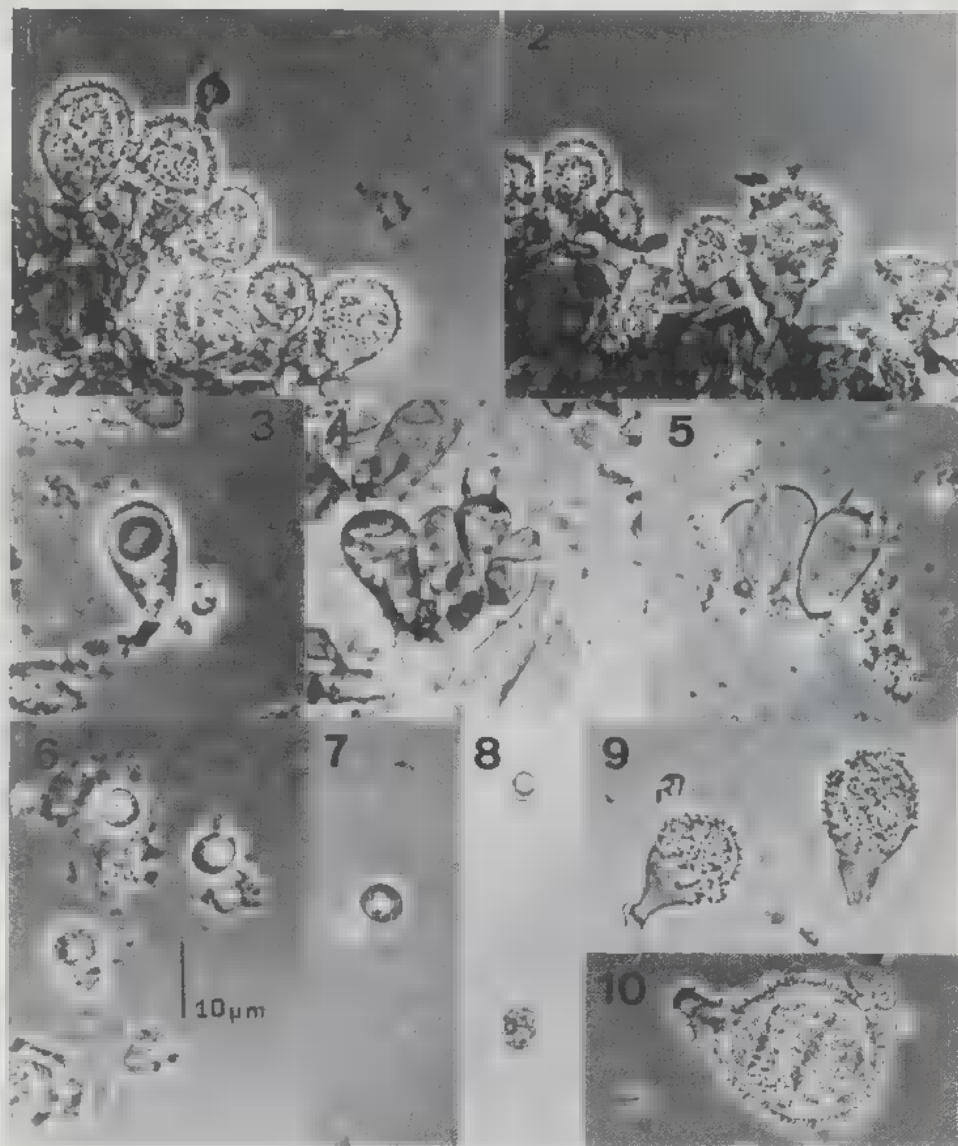
### INTRODUCTION

On the occasion of the 8th Mycological Meeting in "Esplugas de Llobregat" (Oct. 24-30, 1994), we could gather good collections of two *Mycena* species we have never seen before. One of these species could be determined as *Mycena corynephora* being the first record for Spain. Studying the second one, *Mycena font-queri*, so far known in Europe from Spain, Italy and France only, some additional characters, not mentioned in Maire's original diagnosis, could be noted.

*Mycena corynephora* Maas Gesteranus, *Proceedings C* 86: 407. 1983. (Figs. 1-16)  
*M. quercus-ilicis* Kühn. ss. Robich non Kühn., *Assoc. Micol. Bresadola* 32: 172-173. 1989.

**Material estudiado:** Gerona: Abadía Sant Martí de Riells, on moss-covered bark of *Castanea sativa*, leg. G. Moreno, R. Pöder & C. Illana, 25.X.1994. AH 18321, IB 94/906 and MCVE 030/B.

Basidiomata gregarious. Pileus, 2-4 mm across, subglobose to campanulate, white or whitish, farinose to pruinose, sulcate, transparently striate in older specimens. Lamellae and lamellulae (7-12) well developed, ascending, adnate, whitish, with pruinose edge. Stipe, 3-10 x 0,5-3 mm, cylindric, curved, white-furfuraceous in all its length, base not distinctly bulbous, without disc. Odour and taste not noted.



Figs. 1-10 - *Mycena corynephora* Maas Gesteranus, AH 18321, 1-2: pileipellis, 3: immature basidium, 4-5: basidia, 6-8: spores, 9-10: cheilocystidia.

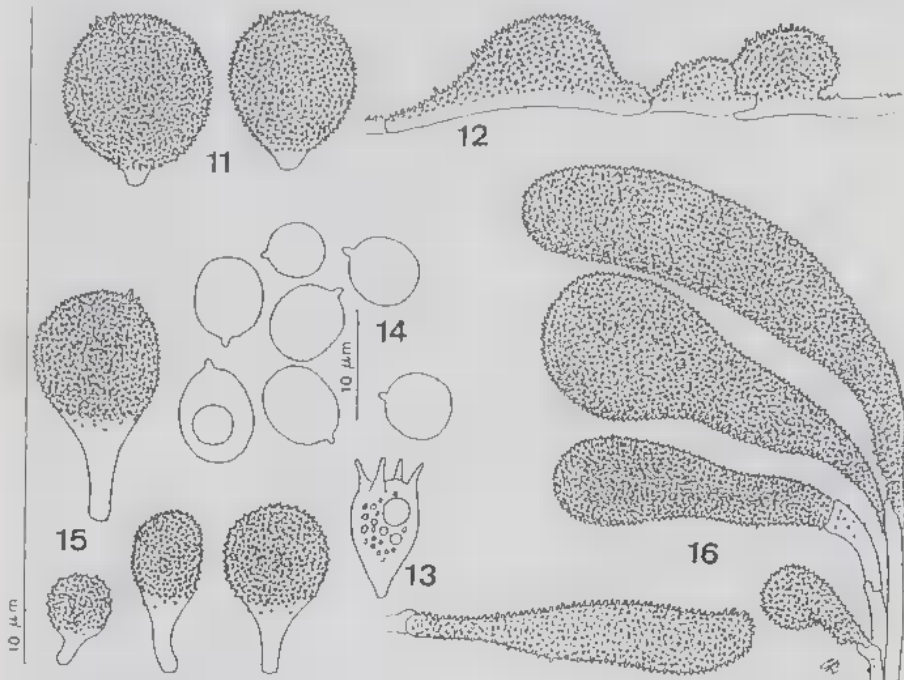
Basidia 19-25 x 10-13 µm, clavate, 4-spored. Spores 6-8 x 6-7 µm, globose to subglobose, hyalin, smooth, and amyloid. Cheilocystidia 30-35 x 15-25 µm, clavate to pyriform, with numerous short excrescences. Pleurocystidia not observed. Pileipellis

consisting of clavate to pyriform cells, 20-35 x 10-25  $\mu\text{m}$ , with numerous cylindrical excrescences. Terminal cells of the cortical layer of the lower part of the stipe (Caulocystidia?) up to 160  $\mu\text{m}$  (250  $\mu\text{m}$ ) long and 10 x 25  $\mu\text{m}$  wide, clavate, densely covered with excrescences. Clamps present in all tissues.

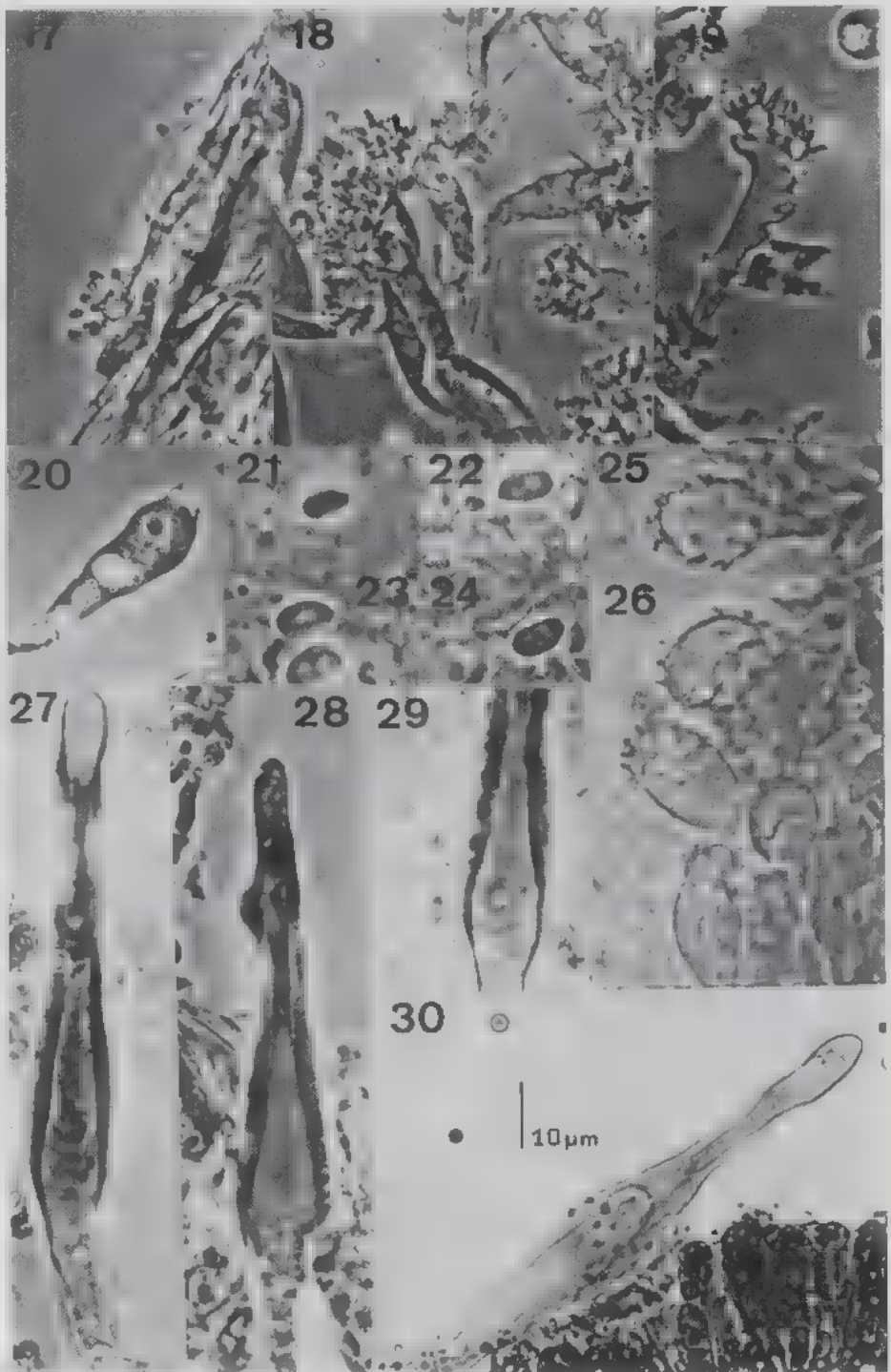
**Remarks:** *Mycena corynephora* is characterized by its small size, white, farinose basidiomata, the pileipellis with clavate, "brush-like" cells, the globose amyloid spores, and its special habitat: it grows on moss-covered bark of living deciduous trees.

According to Maas Geesteranus (1983), *Mycena corynephora* belongs to section *Sacchariferae* Kühn. ex Sing. In this section Maas Geesteranus (1983) has distinguished five species: *Mycena adscendens* (Lasch) Maas G., *M. discopus* (Lév.) Quél. and *M. nucicola* Huijsm. These three species develop a basal disc that is lacking in both *Mycena corynephora* and *M. alphitophora* (Berk.) Sacc. The latter can be distinguished from *M. corynephora* by its elliptical spores and its cylindrical caulocystidia.

*Mycena corynephora* was originally described from Italy, growing on bark of *Aesculus hippocastanum*, (Maas Geesteranus, 1983). Later on it has been recorded from



Figs. 11-16 - *Mycena corynephora* Maas Geesteranus, AH 18321, 11-12: pileipellis, 13: basidium, 14: spores, 15: cheilocystidia, 16: caulocystidia.



Switzerland, on *Acer sp.*, (Breitenbach & Kränzlin, 1991), as well as from Germany, Austria, France, Great Britain, Italy, Switzerland and Slovenia (Courtecuisse, 1994).

*Mycena yalensis* Sing., with its small sized, whitish basidiomata and globose spores, seems to be a related species. The spore size is similar in both species (at least in our collection) but according to Desjardin (1995) *M. yalensis* may be distinguished by its cystidia (located where the stipe base contacts the substrate) that are covered "with more densely arranged, shorter spinulae, and fructification on bark of *Alnus* in Argentina". Considering the possible identity of the two species, these features should be noticed in future collections.

***Mycena font-queri* Maire, Treb. Mus. Ci. nat. Barcelona 15 (bo.2): 58, fig. 5. 1933. (Figs. 17-33)**

**Material estudiado:** SPAIN: Gerona: Sant Grau, en humus de *Quercus ilex* y *Q. suber*, leg. G. Moreno, R. Pöder & C. Illana, 25.X.1994, *neotypus* AH 18322 and *isoneotypus* IB 94/905; Abadia Sant Martí de Riells, en humus de *Quercus suber*, leg. F. Bersan & G. Robich, 26.X.1994, AH 18323 and MCVE 398/C. ITALY: Su Turighe, Orgosolo (NU), Leg. C.Rossi & R.Brotzu, 30.10.1993. MCVE 398. FRANCE: Puget, Leg. J.Trimbach, (Erb. Trimbach n. 2679), MCVE.N. 398/B.

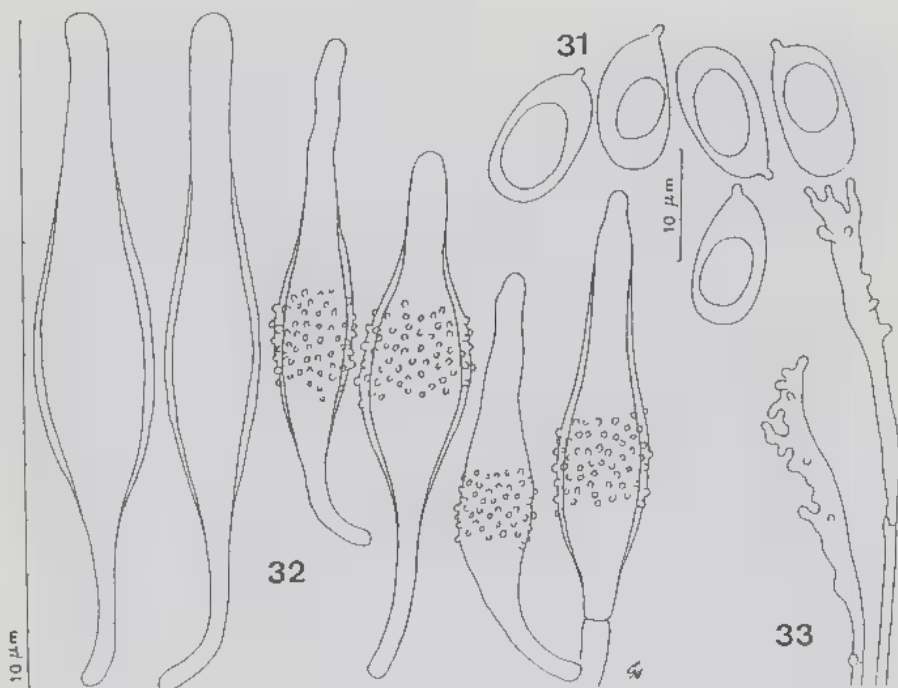
Basidiomata gregarious. Pileus 1-3,5 cm across, conical to campanulate-conical, apex obtuse, entirely dark-brown to blackish, radially fibrillose. Lamellae (35 to 45), ascendent, with lamellulae, adnate to uncinatate, interveined, greyish. Stipe 3-8 x 0,2-0,3 cm, cylindrical, hollow, pale greyish, pruinose at the apex, radicating, with whitish fibres at the base. Odour and taste not remarkable.

Pileipellis in the uppermost layer with radially arranged, distinctly diverticulate hyphae of variable morphology, followed by smooth, cylindrical hyphae with a vacuolar brown pigment. Basidia 38-42 x 8-12  $\mu\text{m}$ , 4-spored. Spores (9)10-13,5 x 5-7  $\mu\text{m}$ , elliptical to subcylindrical, hyalin and amyloid. Pleurocystidia abundant, 100-140 x 12-20  $\mu\text{m}$ , fusiform, cell-walls noteworthy thick (x 3-7  $\mu\text{m}$ ), staining reddish in Melzer's reagent, sometimes with scattered excrescences in the middle part. Cheilocystidia 40-60 x 10-17  $\mu\text{m}$ , forming a sterile edge, thick-walled, morphology remarkably heteromorphic: claviform, utriform to pyriform, with numerous excrescences towards the apex. Clamps present.

**Remarks:** *Mycena font-queri*, originally described by Maire (1933) from Catalonia, is characterized by its dark, blackish-brown pileus, the diverticulate hyphae of the pileipellis, and its prominent, thick-walled and diverticulate hymenial cystidia.

According to our investigations, the *typus* of *Mycena font-queri* is not known to be in existence; therefore we propose the *exsiccatum* AH 18322 as *neotypus*. The designated collection was made in the same habitat as the original one; the macroscopical and anatomical features are in accordance.

Figs. 17-30 - *Mycena font-queri* Maire, AH 18322, 17-19: pileipellis, 20: basidium, 21-24: spores, 25-26: cheilocystidia, 27-29: pleurocystidia, 30: pleurocystidia with warty excrescences.



Figs. 31-33 - *Mycena font-queri* Maire, AH 18322, 31: spores, 32: cheilocystidia, 33: caulocystidia.

In Maire's original diagnosis (1933), and afterwards, in the monograph of Kühner (1938, and in the revision of Maas Geesteranus (1986), the distinctly diverticulate hyphae of the pileipellis are not mentioned. The descriptions of these authors are all based on Maire's original work, so, for example, Kühner (1938): "revêtement pileïque formé de grosses hyphes radiales pleines d'un pigment brun vacuolaire, au-dessus desquelles courent, en direction radiale, des faisceaux espacés et anastomosés, d'hyphes grêles et lisses". Obviously, the distinctly diverticulate hyphae of the uppermost layer of the pileipellis have been overlooked.

In addition, cheilocystidia are very abundant, forming a sterile edge. The excrescences from the middle part of the pleurocystidia were mentioned by Maire (1937) in a second paper: "cystides à membrane souvent rugueuse extérieurement".

*Mycena latifolia* (Peck) A.H. Smith, a species known from Europe and from America, can be separated by its thin-walled cystidia and smaller spores (6,5-9 x 3,5-4,5 μm).

Until now, *Mycena font-queri*, has been reported only from Spain (Catalonia), France, Italy and North Africa (Algeria), growing on plant debris beneath *Quercus spp.* and *Pinus halepensis*, respectively.

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